

REMARKS

A petition pursuant to 37 CFR § 1.136(a) and the fee required by 37 CFR § 1.17(a)(3) are submitted herewith. The due date for response to the Official Action mailed September 22, 1999 is now March 22, 2000.

Independent claims 1, 6, 10, 14, 26 and 27 have been amended to more clearly and unambiguously set forth the subject invention. Specifically, the claims now make clear that the secret information is stored in an external device and is fed from the external device.

Claims 1-20, 26 and 27 were rejected under 37 U.S.C. § 103(a) as being unpatentable over Friedman in view of Davies. The rejection notes that Friedman does not disclose storing secret key information which is fed from an external device. The rejection says that Davies discloses a secret key in an external device (Fig. 1 and Col. 4, lines 45-50) and that it would have been obvious to one of ordinary skill in the art at the time the invention was made to store secret key information in an external device, as taught in Davies instead of storing the secret key information internally in Friedman's system because this would reduce the storage needed in the system and would protect it against tampering.

However, this is not how applicant's claims differ from Friedman. Applicant's claims differ from Friedman and Davies for a different reason. Applicant's independent claims specify: "means for generating a digital signature" (claim 1); "generating a distinguishing information" (claim 6); "carrying out an operation using the image data and the secret information" (claim 10); "a processor . . . for generating a digital signature" (claim 14); and a "step for generating a digital signature" (claims 26 and 27). These elements are neither shown in nor suggested by either of Friedman or Davies.

In applicant's invention, the user enters information into a computer for transmission to another computer. At the same time, the user feeds secret information from an external device, such as a card, into the computer. As a result, the information entered into the computer is authenticated by means of the user's digital signature, or the information is encoded so that it cannot be intercepted by an unauthorized person. Thus, both the information entered by the user and the secret information fed from the external device are combined in the computer to carry out an operation such that the computer either imposes a digital signature on, or specially encodes the entered information.

Davies does not disclose using both the input information and the secret information to produce a digital signature or an encoded output. Instead Davies only discloses the use of secret information to gain access to the computer. The information which is input from the card 10 of Davies does not affect the information which the user inputs. Instead the card information only controls the user's access to the computer.

As emphasized by Davies in Column 4, lines 58-61, "The token is so constructed and/or programmed that it is impossible to read out this key by way of the input/output port 1 [sic 11] regardless of what signals are applied to the port". Thus Davies clearly does not use the secret information in conjunction with the information being input to or output from the computer.

As can be seen from the foregoing, the above discussed elements or steps recited in the independent claims 1, 6, 10, 14, 26 and 27 are neither shown in nor suggested by Davies. Therefore, no combination of Davies with Friedman could result in applicant's invention as set forth in those claims. For this

reason claims 1, 6, 10, 14, 26 and 27 patentably distinguish over Friedman and Davies considered both individually and in combination.

Dependent claims 2-5, 7-9, 11-13 and 15-20 incorporate the above discussed distinguishing recitations of the independent claims and patentably distinguish over the references for the same reasons given for the independent claims. In addition the specific apparatus and methods defined by the dependent claims provide additional advantages, as can be appreciated from the specification, as well as additional novelty; and for these reasons also, dependent claims 2-5, 7-9, 11-13 and 15-20 are patentable.

It is submitted in view of the foregoing that this application is now in condition for allowance. Further consideration by the Examiner and allowance of this application is requested.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,



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